

APPENDIX A

SHIP STRUCTURE COMMITTEE STRATEGIC PLAN

The Ship Structure Committee (SSC) was established in 1946 on the recommendation of a board of investigation convened by the Secretary of the Navy to inquire into the design and methods of construction of welded-steel merchant vessels. As that investigation concluded, several unfinished studies and items worthy of investigation remained. The board of investigation recommended that a continuing organization be established to formulate and coordinate research on matters pertaining to ship structures.

VISION

TO ELIMINATE MARINE STRUCTURAL FAILURES

MISSION

To enhance the safety of life at sea, promote technology and education advancements in marine transportation, and to protect the marine environment. This will be done through advocating, participating in, and supporting cooperative research and development in Structural Design, Life Cycle Risk Management of Marine Structures, and Production Technologies.

STRATEGIC GOALS

1. To identify gaps in structural knowledge, and to develop a research and development plan to bridge the gaps.
2. To address today's ship structural performance and safety assessment issues.
3. To be recognized as a credible resource for ship safety experts.
4. To advocate and search out cost share opportunities and partnerships, where possible and practicable, to complete the projects recommended by the Committee.

GUIDING PRINCIPLES

1. The Committee shall ensure good stewardship of Committee funds and resources.
2. The Committee shall support projects to improve Safety of Life at Sea and to protect the Marine Environment through enhancing the performance of ship structures.
3. The Committee shall support projects developed and submitted by the member agencies, liaison members and other industry supporters.
4. The Committee shall ensure research results and new technology are provided in a useable form to the customer base.

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APPENDIX B

MEMBERSHIP, ORGANIZATION, AND PROJECT ADMINISTRATION OF THE SHIP STRUCTURE COMMITTEE

The purpose of the SSC is to enhance the safety of life at sea, promote technology and education advancements in marine transportation, and to protect the marine environment. This will be done through advocating, participating in, and supporting cooperative research and development in Structural Design, Life Cycle Risk Management of Ship Structures, and Production Technologies.

MEMBERSHIP

The membership of the SSC consists of the personnel listed below:

SHIP STRUCTURE COMMITTEE PRINCIPALS

RADM Robert C. North, USCG (Chairman)
Assistant Commandant Marine Safety and
Environmental Protection
U.S. Coast Guard

Dr. Donald Liu
Senior Vice President
American Bureau of Shipping

Mr. Robert McCarthy
Director, Survivability and Structural
Integrity Group
Naval Sea Systems Command

Mr. Bud Streeter
Director General, Marine Safety,
Safety & Security
Transport Canada

Mr. Marc Lasky
Director,
Office of Ship Construction
Maritime Administration

Dr. Neil Pegg
Group Leader / Structural
Mechanics
Defense Research Establishment
Atlantic

Mr. Thomas Connors
Director of Engineering
Military Sealift Command

EXECUTIVE DIRECTOR
LT Thomas C. Miller
United States Coast Guard

CONTRACTING OFFICER TECHNICAL REPRESENTATIVE
Mr. William J. Siekierka
Naval Sea Systems Command

ADMINISTRATIVE ASSISTANT
Ms. Jeannette Delaney
Q Systems, INC

SHIP STRUCTURE COMMITTEE SUB-COMMITTEE MEMBERS

UNITED STATES COAST GUARD

Captain Mark VanHaverbeke
Mr. Walter B. Lincoln
Mr. Rubin Sheinberg
Vacant

AMERICAN BUREAU OF SHIPPING

Mr. Glenn Ashe
Mr. John F. Conlon
Mr. William Hanzalek
Mr. Philip G. Rynn

NAVAL SEA SYSTEMS COMMAND

Mr. W. Thomas Packard
Mr. Allen H. Engle
Mr. Edward E. Kadala
Mr. Charles L. Null

TRANSPORT CANADA

Mr. Peter Timonin (Chairman)
Mr. Feliz Connolly
Mr. Justus Benckhuysen
Mr. James Reid

MARITIME ADMINISTRATION

Mr. Chao H. Lin
Dr. Walter M. Maclean
Mr. Richard P. Voelker
Mr. Paul S. Gilmour

DEFENCE RESEARCH ESTABLISHMENT ATLANTIC

Mr. Layton Gilroy
LCDR A. R. Graham
Dr. Roger Hollingshead
Mr. John Porter

MILITARY SEALIFT COMMAND

Mr. Robert E. Van Jones
Mr. Richard A. Anderson
Mr. Jeffery E. Beach
Mr. Michael W. Touma

SSC STUDENT MEMBER

Ms. Pamela Harris
Memorial University of
Newfoundland St. John's

ORGANIZATION

The SSC member agencies are aligned as detailed in Figure B-1 to carry out the duties and responsibilities of the Committee outlined in the SSC Organization Manual.

RESPONSIBILITIES

The SSC agencies and liaisons shall provide technical projections, reviews, and advice to the SSC on a research program that addresses insert 3 focus areas. Specific activities include:

Starting with fiscal year 2000 projects will operate on the following schedule:

Project Task	SSC Due Date	GCRTMC Due Date	SRPs Due Date	JIPs Due Date	SBIR Due Date	USPs Due Date
Write-ups	To Exec. Director by January of year prior to funding year	To Exec. Director by January of year prior to funding year	To Exec. Director as they occur	To Exec. Director by January of year prior to funding year	To Exec. Director by January of year prior to funding year	To Exec. Director by January of year prior to funding year
Compile Project Ideas Letter Report for the SSC.	<i>To be completed by the Executive Director and Staff and submitted to the SSSC for consideration by March 1ST of each year</i>					
Selection by SSSC	May of FY prior to funding year	May of FY prior to funding year	As they occur	May of FY prior to funding year	May of FY prior to funding year	May of FY prior to funding year
Contract Initiation	October of funding year	GCRTMC schedule	May of fund year	October of funding year		As Needed
Funding request to appropriate group/agency		January of funding year	As Occur	July	January of funding year	As Needed

RESEARCH PROGRAM DEVELOPMENT

Each organization represented on the SSC annually presents its perceived needs for near-term and long-range research efforts. An annual joint meeting of the Ship Structure Subcommittee is held to review these suggestions, and make project selections.

PROJECT DEVELOPMENT & SUBMISSION

A. Project Write-ups. All projects shall be submitted in the format outlined in Annex (3).

B. Project Matrix. Each project shall write up shall include the following matrix to facilitate project evaluation and selection. For example:

Project Title & Description	Submitting Organization	Required SSC Funding Level	Project Leveraging (point / leverage point)	Project Seed Money (point/50K)	Industry Participation	Project Score	Funding Mechanism / SSC Action
Modeling of Collision Damage	SNAME	\$50K	3:1 (3 points)	50K by SNAME (1 points)	Yes	4	Request SSC Adoption / partial fund at \$50K
Rapid Assessment Software	CMS	\$250K	1:1 (0 points)	None	Yes	1	Request GCRTMC fund
Fatigue of Aluminum Weldments	CMS	\$50K	1:1 (0 points)	None	Yes	1	Request SSC Funding at \$50K
Reliability of Watertight Boundaries	NAVSEA	\$500K	1:1 (0 points)	None	Yes	1	Submit as an SBIR

PROJECT SELECTION

Project Selection.

1. Projects are selected annually for funding from the combined contributions of the member agencies and the available funding mechanisms through SNAME, ASNE, GCRTMC, API, and MARITECH/ASE. Liaison members do not have voting privileges.
2. An **Agency Project Rating Sheet** is attached as Annex (4), and may be used by each agency in preparing for the annual spring business meeting project prioritization process.
3. Project prioritization is completed during the Spring Field Trip Meeting of the SSSC. These results are then forwarded to the Committee via the Annual SSC Status Report for concurrence.
4. The priority meeting is conducted by multi-voting. Each agency will have an appropriate number of votes determined by the Executive Group prior to the meeting that they can assign to the projects. They may not award more than 5 points to any given project. Each agency also has a negative vote that can be used for a project which the agency deems unacceptable. When a project is given a negative vote, the agency will have the opportunity to explain why they feel it should not be selected (i.e. work has already been completed, write up is wrong, etc.).

5. PTCs are open to everyone. It is always preferable to get volunteers that are interested and knowledgeable on the topic. Agency participation on PTCs is voluntary, but it is an obligation based on voting priority. In order to ensure an adequate PTC membership to conduct the contract oversight:

- a. Highest voting agency shall provide the PTC Chairperson.
- b. The next 3 highest voting agencies shall provide PTC members in order until there are at least 4 members (excluding the industry representative and technical advisor).
- c. Should some of the lower ranked PTCs have inadequate representation, the agencies voting the project highest shall be requested to provide membership.
- d. The Executive Group will determine which projects will need Technical Advisors. They shall take into account the nature of the project and the expertise in the PTC.
- e. Additionally, it is required that each PTC have representation from the primary customer base.
- f. If the Committee is unable to locate interested primary customer members for the PTC, funding of the project may be reconsidered.

PROJECT FUNDING

Project Funding Options. The funding options for SSC projects are listed below:

1. Ship Structure Committee complete or partial funding (SSC). The Subcommittee shall prioritize and select projects in accordance with the voting procedures listed below.
2. Gulf Coast Region Maritime Technology Center complete funding (GCRMTC). The Subcommittee shall prioritize and select potential projects each year to be submitted to the GCRMTC for consideration of funding. These projects should be of high interest to the SSC.
3. Strategic Reserve Project Funding (SRPs). Developed to allow rapid SSC funding of structural performance projects identified throughout the year as problems (i.e. "Today's Issues").
 - a. Short fused projects may be funded from the SSC Strategic Reserve.
 - b. The Strategic Reserve will be equal to the level of funding required for the last SSC project selected to be funded.

The level of funding within the strategic reserve shall not be less than \$75,000.

4. Joint Industry Projects (JIPs). The SSC should strongly consider selection of proposed projects that offer leveraging of SSC funds with funds / support available from industry (i.e. SNAME, ASNE, API, MARITECH / ASE, etc). The following shall guide the Subcommittee for review of JIPs:

- a. The item should be consistent with the Committee's Strategic Plan.
- b. There should be an urgency that would preclude the item from going through the usual cycle of development and review.
- c. For JIPs, the project should be likely to be taken on even if the SSC does not join as a sponsor.
- d. The project should be considered to have strong industry support.
- e. The project must be able to be completed under the limitations of available contracting options.
- f. The deliverables should not be proprietary.
- g. Exceptional projects may receive special consideration even if they do not meet all of the above criteria.

5. Small Business Innovative Research (SBIR). Available through NAVSEA for project funding up to ~ \$750,000.

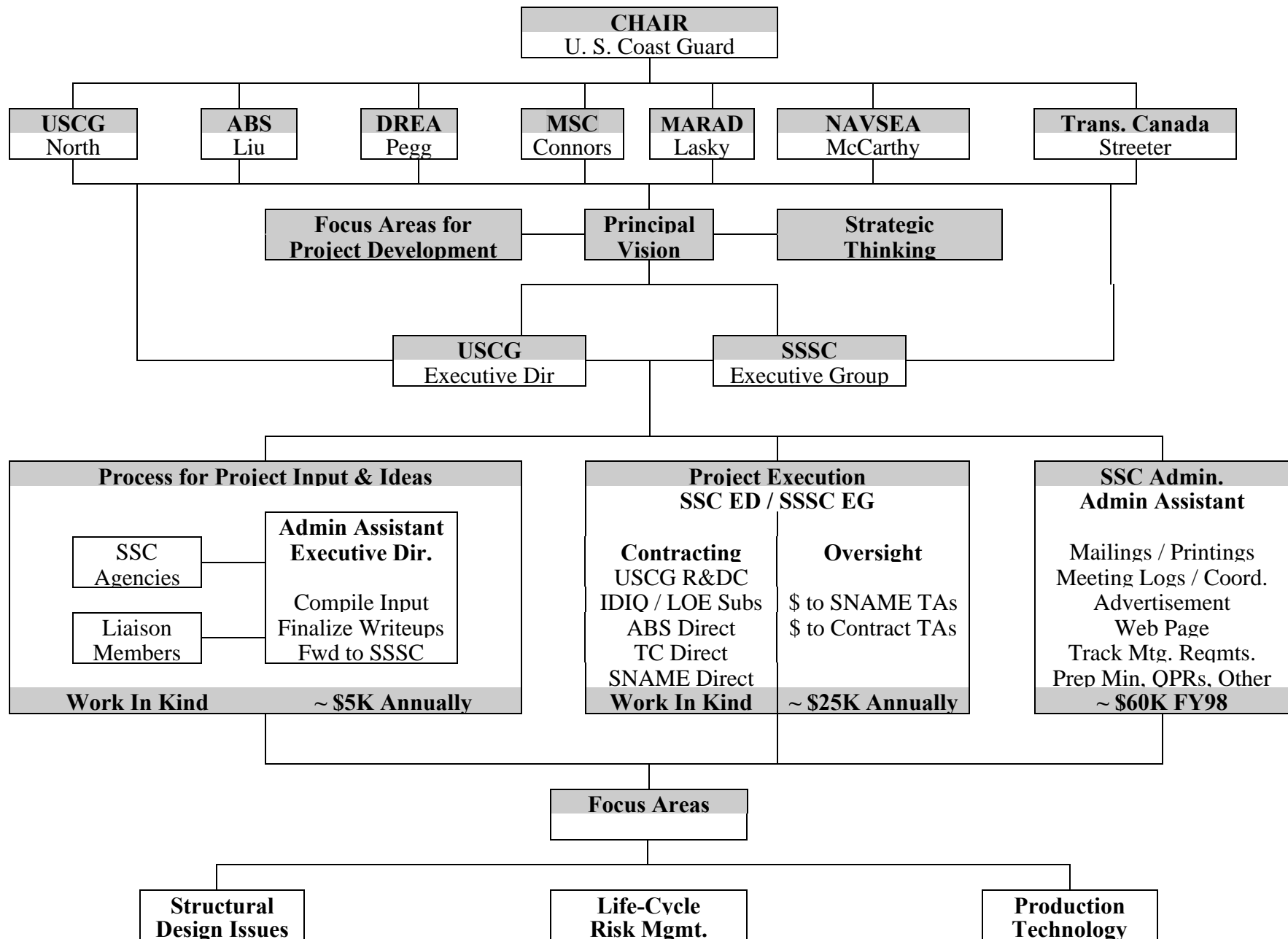
6. Unsponsored Reports (USPs). Review and dissemination of work already completed (Unsponsored reports) offers the SSC another means of leveraging funding. The criteria for the SSC to publish reports that were not sponsored by the Committee are the following.

- a. Timely and of extraordinary technical value to the marine industry.
- b. Presented at an SSC or SSSC meeting; and
- c. Accepted by an ad hoc PTC formed for the specific purpose of reviewing the report.

DISSEMINATION OF SSC RESEARCH INFORMATION

The SSC will disseminate the research results through publication of a hard copy report until the electronic media website is on line. Once this is established, reports will be disseminated via electronic copy through this web-site. In addition, the SSC encourages investigators to prepare papers for professional society meetings and technical journals.

To foster the use of the published information, the SSC distributes the reports to individuals and agencies associated with, and interested in, its work. These reports are available through the National Technical Information Service and are reviewed in various marine and naval architecture journals.



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